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An Updated Cost-Record System for a Logging Business

Abstract

This cost record book is especially for those in the logging business and provides for a complete record of costs and income. The recorded information is useful to determine the cost of machinery operation or of unit wood production. It provides the means of comparing month to month income and costs, determining what one can afford to bid on stumpage sales, or preparing tax returns. The logger, or a family member, can keep the records with little or no additional training or experience with minimal work and time. Twelve different forms are available in the cost record system.

The Authors

Frederick E. Hampf and Emerson W. Pruett were Forest Products Technologists and Joseph H. Smith, a Logging Engineer. All were with the Resource Use Staff of the Northeastern Area, State and Private Forestry, USDA Forest Service, Broomall, Pennsylvania.

Updating for this publication was done by George R. Niskala and Jon D. Schendel, Forest Management and Use Staff, Northeastern Area.

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INTRODUCTION

The cost-record system has been published especially for you, the logging operator. With it, you will be able to record and monitor your costs and income. You can find out how much it costs to operate a piece of machinery, or to produce a certain volume of wood. You can compare income and costs on a monthly basis, or determine the amount that you can bid on stumpage sales.

This publication can be used with a minimum amount of time and effort. Keeping cost records will enable you to make intelligent business decisions. You will have a clear knowledge of your business from month to month and from year to year. If there are weaknesses in your method of doing business, these records will show you where they are.

You will have the information needed to:

1. borrow money
2. establish credit
3. purchase equipment on time payment
4. help determine stumpage and logging costs
5. take in a partner
6. divide profits with the partner
7. compute business taxes
8. prepare your income tax return
9. determine whether it is more profitable to contract with others to do some of the logging or trucking
10. make plans to increase or change part of the business
11. help your heirs settle your estate should you die

HOW TO USE THE SYSTEM

No matter what type of logging business you have, you need to keep records of all your expenses and income to know the financial status of your business. This cost-record system can be used whether you are self-employed or operate a business with many employees.

This publication contains all of the forms that you will need for your business. If you want to know only your business expenses and income, use Forms 1 through 3. For tax purposes, you will need to keep a record of employee payrolls and the wear and tear on your equipment, using Forms 4 and 5. To determine accurately how much wood was cut and hauled from each woodlot to each buyer and what your wood costs are, use Forms 6 through 8. To determine the cost of operating and how much work is done with each piece of equipment, use Forms 9 through 12.

Setting Up The System

For most people making daily entries on record forms is difficult and time consuming. Some carry a small notebook and enter costs for supplies, bills paid, or money received for wood sold, or work done for others. Later, they enter the information in a record book. Sales receipts and cash register tapes can serve as records. Paying by check is an excellent way to keep records. Set up a charge account with a local store to buy small items, supplies, and parts. Then, pay this monthly bill by check.

Keeping A Checkbook Account

This system is based on the use of a bank checking account. It is strongly recommended that you maintain separate checking accounts for personal and family expenses and for business expenses.

Deposit all cash payments for wood sold or work done for others in the business checking account. If you pay a business expense with a check from the personal account, transfer the money to your personal account by check from the business checking account. Transferring money from either account by check is an important practice that clearly separates business and personal expenses and provides proof of the exchange.

Pay yourself a weekly salary or a drawing allowance with a check from the business checking account, and deposit the money in your personal checking account for family expenses. Your salary or "draw" is a business expense so it must be recorded on the payroll record form, the same that you use for your

workers. This record is for your benefit since it shows payments made into Social Security and money withheld for income tax purposes. Cancelled checks are your proof of payment and the control for your business. The check stub is your record that you paid a certain bill until you receive the cancelled check. If possible, pay your bills in the same month that you receive them. This consolidates monthly income and expenses. When the bank sends the monthly checking account statement and cancelled checks, compare them against the stubs in the checkbook and your deposit slips to verify your bank balance. After depositing cash or check for wood sold or work done for others in the business checking account, record that information in your checkbook and on the "Record of Income," Form 1A on page 31.

Keep all cancelled checks, cost records, and other supporting papers for tax returns for 3 years after the return is due or 2 years after payment, whichever is later. Records of real estate and depreciated equipment must be kept longer.

EXPENSES

To control your business and make decisions, you need to keep records of and identify your expenses. You can do this by using the code system shown under "Recording Expenses." Other code numbers can be added; for example, 17.5 might identify state sales tax.

I. Expenses - Your important business expenses entail:

1. Management

- a. Looking for stumpage, contract jobs, labor, and equipment.
- b. Bidding on timber sales.
- c. Selling timber products.
- d. Borrowing money
- e. Managing the business office
- f. Completing reports required by law
- g. Providing supervision

2. Logging

- a. Felling
- b. Bucking
- c. Skidding
- d. Loading

3. Hauling

- a. Loading
- b. Hauling
- c. Unloading

4. Roads

- a. Logging road construction
- b. Skid trail and landing construction
- c. Road and trail maintenance
- d. Woodlot cleanup, grass seeding of roads and trails
- e. Waterbars

5. Contract work (these could be placed in any of the previous costs)

- a. Contract work you do for others
- b. Contract work others do for you

II. Recording Expenses

You must keep a running record of the following expenses. The following coding system is suggested for recording on each check or payment record. Further breakdown of the code numbers can be done by adding a decimal point to the primary code number and adding a sub code. For example 1.1 off road diesel fuel; 1.2 highway diesel fuel; 3.1 oil, grease; 3.2 hydraulic fluid.

<u>Code Number</u>	<u>Type of Expenses</u>
1	Diesel fuel: bulk and individual purchases.
2	Gasoline: bulk and individual purchases.
3	Oils, grease, other lubricant purchases.
4	Small tools, and spare part purchases.
5	Wages, salaries, and bonuses paid to employees.
6	Your salary or drawing allowance.
7	Maintenance and repair of equipment.
8	Maintenance and repair of business buildings.

- 9 Road and trail building and maintenance on your logging jobs.
- 10 Subcontract logging work done by others for you.
- 11 Travel: to banks, market outlets, stores, timber sales, repair shops.
- 12 Travel: costs related to vehicles used to carry workers.
- 13 Stumpage (bought by you).
- 14 Tax: Federal highway use, paid on trucks and truck-trailers (IRS Form 2290).
- 15 Tax: Social Security, only your share as employer.
- 16 Tax: State and Federal unemployment.
- 17 Tax: Real estate, office, garage, other business buildings and land.
- 18 Tax: Real estate on timberland you own.
- 19 Utilities: Electricity, heat, telephone, water, etc.
- 20 Rent: For room at home or additional space used for office.
- 21 Rents and leases: For use of equipment, land, and buildings owned by others.
- 22 Insurance: Premiums for Workmen's Compensation
- 23 Health Insurance
- 24 Interest: On business loans and notes.
- 25 Interest: On time payments for equipment purchased.
- 26 Licenses, fines, and toll fees for car, trucks, and other equipment.

- 27 Fees: To bookkeeper or accountant.
- 28 Fees: To business consultant
- 29 Fees: To lawyer.
- 30 Office supply and furniture purchases.
- 31 Depreciation of business buildings.
- 32 Depreciation of cars, trucks, and equipment
- 33 Dues and donations as member of business associations.
- 34 Entertainment of business clients.
- 35 Subscriptions to business and technical magazines and newspapers.
- 36 Advertising
- 37 Clothing
- 38 Miscellaneous

GENERAL INFORMATION

Some business information is required by law, and other information, including record forms, are needed to analyze your business in detail.

In many states, tax workshops are held for small businesses. For more information on these seminars, call the Federal Tax Information number listed under the Internal Revenue Service (IRS), or call the Small Business Administration.

In addition to keeping records of your expenses and income, you need to keep accurate and detailed records of wood production, road and skid-trail building, and stumpage inventory. These records will assist you in analyzing your system, increasing profit, and borrowing money.

Requirements under the Fair Labor Standards Act

Employers are required to keep certain records on wages, hours and other items, as specified by the Fair Labor Standards Act. Most of the information is of the kind generally maintained by employers in ordinary business practice and in compliance with other laws and regulations. The records do not have to be kept in any particular form and time clocks need not be used. With respect to an employee subject to both minimum wage and overtime pay provisions, the following records must be kept:

- Personal information, including employee's name, home address, occupation, sex, and birth date (if under 19 years of age).
- Hour and day when workweek begins
- Total hours worked each workday and each workweek
- Total daily or weekly straight-time earnings
- Regular hourly pay rate for any week when overtime is worked
- Total overtime pay for the workweek
- Deductions from or additions to wages
- Total wages paid each pay period
- Date of payment and pay period covered.

Exemptions

Some employees are excluded from the minimum wage or over-time provisions, or both, by specific exemptions. Because each exemption is narrowly defined under the law, an employer should carefully check its exact terms and conditions before applying it, e.g. any employee in planting or tending trees, cruising, surveying, or felling timber or preparing or transporting logs or other forestry products to the mill, processing plant, railroad or other transportation terminals, or if the number of employees in such forestry or lumbering operations does not exceed eight. Detailed information is available from local Wage-Hour offices.

According to Federal and State laws, a worker may be your employee if you pay him or her an hourly wage or for piece-work and if withholdings and deductions are made from gross wages under current income tax and Social Security laws. A worker may be a contractor when you agree to pay him or her a fixed sum of money for work. You should obtain an opinion from the local tax office, a bank official, or a bookkeeper familiar with the laws on employee benefits and tax withholdings as to whether your workers are employees or contractors. Internal Revenue Service Publication 539 gives examples, and IRS Form SS-8 can be used to obtain an IRS opinion.

As an employer, you need to know the facts about government reports required under the Social Security law (which now includes Medicare), the income tax laws, and state and federal unemployment laws. The local tax office or bank officials can answer questions about these laws. If you are an employer, you must have an IRS identification number. To obtain this number, complete IRS Form SS-4.

Employee Payroll and Work Record Forms

There are many types of payroll register books that contain payroll and work record forms. These books can be purchased in stationery, book, and department stores. Your Timber Producers' Association may have a payroll form that fits your needs. A sample employee payroll form (Form 4) is shown on Page 44.

Inventory and
Replacement of
Vehicles and
Equipment

All items of equipment that have a useful life of more than one year are business assets. Keep a record of:

1. All such property on hand at the beginning of each year.
2. Any equipment purchased during the year.

Importance of
Annual Inventory
of Assets

Taking an inventory of assets is needed to:

1. Prepare your profit and loss statement for the year.
2. Determine your net worth in business.
3. Compute the replacement (depreciation) expense for the year.

Managing your
Taxes

Since the tax laws are continually changing, taxes will always be a problem. Good tax management requires some knowledge of the tax laws that affect your business. Because of the complexity of these laws, the best you can hope for is to understand the basic federal laws that apply to your business. We strongly suggest you take your tax problems to an accountant or tax expert.

Investment Tax
Credit

There is a difference between tax deductions and tax credits. Deductions reduce the amount of your taxable income. Normally, anything that is considered a cost of doing business is a deductible item. For example, fuel, labor, repairs and maintenance, parts, and depreciation on equipment, are deducted from total income before calculating your income taxes. Figure 1 is a more complete listing of typical business deductions. However, tax credits reduce the amount of taxes to be paid and are written off directly against your tax bill. Therefore, a \$2,000 tax credit may be worth \$6,000 or \$8,000 or more in tax deductions, depending on the marginal tax rate for your business.

Investment tax credits are included in the tax code to encourage businesses to invest in new equipment. The investment credit allows you to claim a tax credit equal to a fixed percentage of the cost of new equipment for the year that it is bought. The percentage rate is currently fixed at ten percent of the qualifying investment (Tax Reform Act of 1976 and 1981 Economic Recovery Tax Act), and can be used for any assets that meet the following:

1. Are depreciable;
2. Have a useful life of at least three years;

Figure 1: List of Typical Deductible Business Expenses

Account Books/Ledgers	Insurance (Fire, Liability, Theft)
Accounting/Bookkeeping Services	Interest on Business Debts
Advertising	Licenses
Auditing Fees	Magazines/Journals/Publications/Books
Automobile Expenses	Office Furnishings/Supplies
Bad Debts	Payroll and Withholding Taxes
Bank Service Charges	Postage
Bonding Fees	Property Taxes
Business Cards	Rent
Business Gifts	Repairs
Charitable Contributions	Safe Deposit Box
Clothing (Specials)	Salaries
Collection Expenses	Sales Tax
Commissions	Service Charges
Contractors/Consultants Fees	Shipping
Conventions/Conferences	Small Tools
Costs of Producing Goods Sold	State Income Tax
Credit Fees	Telephone
Depreciation	Travel Expenses (Business)
Dues (Business/Professional)	Uniforms
Education Expenses	Unincorporated Business Tax
Employer's Taxes	Utilities (Electricity, Gas, Heat, Water and Garbage)
Entertainment (Business)	Wages
Fuel & Lubricants	

3. Are tangible personal or other property, not including buildings that are used in production;
4. Are put in service for production during the year.

Property is considered in service by the Internal Revenue Service (IRS) either in the year in which you started claiming depreciation on the equipment or the tax year in which it was first ready for service, whichever comes first.

Until 1980 and tax years ending in that year, the amount of tax credit depended on the equipment's expected life. Now tax credits are calculated using the accelerated cost recovery system of the 1981 Economic Recovery Tax Act. In this new system, 60 percent of the investment or purchase price "qualifies" for the credit for three-year property and 100 percent of the investment qualified for the credit for five-year, ten-year and fifteen-year properties. For example, a machine with a \$30,000 purchase price and an expected life of five years would allow an investment tax credit of \$3,000 as shown by the following calculations:

1. Amount eligible for credit: $\$30,000 \times 100\% = \$30,000$
2. Amount of credit: $\$30,000 \times .10 = \$3,000$

This means that for the first year the equipment was used after it was bought, the contractor's tax would be reduced by \$3,000.

The amount of tax credit is limited, however, to the amount of your tax at the end of the year. Investment tax credit limitations are as follows:

- 1981 - \$25,000 plus 80% of excess over \$25,000;
- 1982 - \$25,000 plus 90% of excess over \$25,000;
- 1983 - \$25,000 plus 85% of excess over \$25,000.

Used property limitation for 1981-83 is \$125,000. Unused tax credits may be carried back to the previous three tax years or forward to the next fifteen tax years.

You should be careful when estimating machine life. If the machine is disposed of before the estimated machine life used in claiming the tax credit, the credit must be recalculated. This is done by multiplying the previously calculated

tax credit by a fixed percentage. These percentages are shown in the table in Figure 2. This amount would then be added to your tax liability for that year.

An investment tax credit can also be taken on used equipment, but not for major overhaul of existing equipment. For 1980, the investment credit is limited to the first \$125,000 worth of used equipment bought in one year. For taxable years 1981, 1982, 1983, and 1984 this limit is \$150,000. If the cost of used equipment exceeds the limit, you can select the items to be used for the credit. However, if you expect to be buying \$200,000 to \$250,000 worth of used equipment in a given year, you should consider postponing buying part of the equipment until the following year so that an investment credit can be claimed on all of it. The investment tax credit is a one time tax reduction. If used properly, you can substantially reduce taxes. Any investment credit that cannot be used because of the income limitation can be carried back 3 years and forward 15 years to reduce the income tax liability in those years. When carrying back, since the full tax is usually already paid, a refund will be issued.

Other tax credits are the Jobs Tax Credit available when employing the "unemployable" and energy saving tax credits available to businesses for taking energy conservation measures. Before claiming any tax credits, you are well advised to consult with an accountant or IRS agent. When filing for an investment tax credit be sure to get the special IRS Form 3468. For more information about tax credits send for the free IRS Pamphlet 572, "Tax Information on Investment Credit."

Figure 2: Fixed Percentages for Recalculating Tax Credit and Subsequent Tax Liability When Machine Life if Overestimated

Recovery property disposed of or ceasing to qualify	The recapture percentage:	
	For other than 3-year property	For 3- year property
Within 1 full year	100	100
After 1 full year	80	66
After 2 full years	60	33
After 3 full years	40	0
After 4 full years	20	0
After 5 full years	0	0

Depreciation Scheduling

Depreciation is deducted as a business expense to reduce your income. In addition to selecting a depreciation method which approximates the actual decrease in machine value, you can and should time depreciation expenses to most benefit your business.

Until the 1981 Economic Recovery Tax Act went into effect, three different methods were commonly used for depreciation scheduling: straight line, declining balance, and sum of the years' digits. (See Appendix D for details on how to calculate these methods of depreciation.) Now, depreciation for equipment placed in service on or after January 1, 1981 is determined under the Accelerated Cost Recovery System (ACRS). This system does not use any salvage value rules in calculating annual depreciation, or "cost recovery," allowance. ACRS establishes statutory cost recovery periods that are shorter than the useful life of the asset. These periods are set at three years, five years, ten years and fifteen years depending on the type of property. Various types of property are assigned to each of these classes.

Statutory percentages have been assigned for computing depreciation, depending on the class of property and the number of years since the property was placed in service. The table in Figure 3 gives these percentages for property placed in service during 1981 and through 1984. These percentages will change for property placed in service during and after 1985.

The new tax law allows you to elect to depreciate your equipment by the straight-line method rather than using ACRS (Form 5, Page 44). However, as shown in Figure 4, there are specified recovery periods that can be used with the straight-line methods, depending on the life of the equipment. The example in Figure 5 shows how depreciation is calculated using each of these methods and compares them. It should be noted in the example that direct expenses are assumed constant, resulting in a stable net income before taxes.

By scheduling when new equipment will be added to your operation and analyzing these depreciation options before selecting one, you may realize a tax savings. You should be particularly interested in rapidly depreciating equipment, so that additional cash is "freed up" during the early years of the machine life. This can be to your advantage if the machine is financed, since machine payments are usually made during the first 36 months and the additional cash may be needed for operating expenses.

Figure 3: Statutory Percentages for Calculating Depreciation
for Property Placed in Service in 1981-84

Property	First Year	Second Year	Third Year	Fourth Year	Fifth Year	Sixth Year	Seventh Year	11-15 Year
3-year	25%	38%	37%	--	--	--	--	--
5-year	15%	22%	21%	21%	21%	--	--	--
10-year	8%	14%	12%	10%	10%	10%	9%	--
15-year	5%	10%	9%	8%	7%	7%	6%	6%

Figure 4: Statutory Taxpayer Elected Recovery
Periods for Straight-line Method

<u>Property</u>	<u>Taxpayer Elected Recovery Period</u>
3-year	3, 5, or 12 years
5-year	5, 12, or 25 years
10-year	10, 25, or 35 years
15-year	15, 35, or 45 years

Figure 5: Comparison of Depreciation Methods
For Scheduling Depreciation

For this example, assume the contractor estimates gross income to be \$65,000 per year for the next five years and annual direct expenses to be \$40,000 for the same time. How does the depreciation or the scheduling of depreciation by this method used on a \$25,000 machine with a five year life affect the contractor's income?

Year 1

Depreciation Method
(Under the Accelerated Cost Recovery System)

	<u>Statutory Percentage</u>	<u>Straight-Line</u>
Gross Income	\$65,000	\$65,000
-Direct expenses	-40,000	-40,000
-Depreciation	- 3,750	- 5,000
Net before Taxes	21,250	20,000
Taxes ¹	- 3,188	- 3,000
Net after Taxes	\$18,062	\$17,000
Depreciation	3,750	5,000
	<u>21,812</u>	<u>\$22,000</u>

Year 2

Net before Depreciation	\$25,000	\$25,000
Depreciation	- 5,550	- 5,000
Net before Taxes	19,500	20,000
Taxes	- 2,925	- 3,000
Net after Taxes	16,575	\$17,000
Depreciation	5,500	5,000
	<u>\$22,075</u>	<u>\$22,000</u>

Year 3

	<u>Statutory Percentage</u>	<u>Straight-Line</u>
Net before Depreciation	\$25,000	\$25,000
Depreciation	- 5,250	- 5,000
Net before Taxes	19,750	20,000
Taxes	2,962	3,000
Net after Taxes	\$16,788	\$17,000
Depreciation	5,250	5,000
	<u>\$22,038</u>	<u>\$22,000</u>

¹Calculated on the corporate rate using schedule of rates after 1982.

Figure 5 Cont'd

	<u>Year 4</u>	
Net before Depreciation	\$25,000	\$25,000
Depreciation	- 5,250	- 5,000
Net before Taxes	<u>19,750</u>	<u>20,000</u>
Taxes	- 2,962	- 3,000
Net after Taxes	<u>\$16,788</u>	<u>\$17,000</u>
Depreciation	5,250	5,000
	<u>\$22,038</u>	<u>\$22,000</u>

	<u>Year 5</u>	
Net before Depreciation	\$25,000	\$25,000
Depreciation	- 5,250	- 5,000
Net before Taxes	<u>19,750</u>	<u>20,000</u>
Taxes	- 2,962	- 3,000
Net after Taxes	<u>\$16,788</u>	<u>\$17,000</u>
Depreciation	5,250	5,000
	<u>\$22,038</u>	<u>\$22,000</u>

If you are covered by ACRS, (property placed in service after 12/31/80) and elect straight line you must reduce your depreciation allowance in the first year by 50%. The amount you are unable to deduct in the first year is deducted in the year after the depreciation would otherwise be completed. This is known as a "half year convention" and is also incorporated, in a somewhat modified form, in the statutory ACRS percentages.

An example of how alternative straight-line would work under ACRS, compared to regular straight line and ACRS accelerated using the \$65,000 skidder is as follows:

<u>Method</u>	<u>Year</u>					
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>5th</u>	<u>6th</u>
Straight line	20%	20%	20%	20%	20%	-
ACRS S/L	10%	20%	20%	20%	20%	10%
ACRS	15%	22%	21%	21%	21%	

ACRS straight line would yield depreciation for the \$65,000 skidder in the following amounts:

1st year	6,500
2nd year	13,000
3rd year	13,000
4th year	13,000
5th year	13,000
6th year	<u>6,500</u>
TOTAL	65,000

The main advantage of depreciation scheduling is reducing the taxable income. However, regardless of the depreciation method used, the depreciation amount will normally be the same except declining balance never allows the basis to be reduced to zero. Selecting the best depreciation method for your business simply allows you to schedule depreciation more efficiently and minimize the amount of time capital is tied up in new equipment. Good tax management involves combining the available investment tax credits and depreciation scheduling methods. Tax scheduling becomes more complicated for those contractors who purchase stumpage and harvest it themselves. These contractors must be prepared to take some depletion allowance on the stumpage, and to carefully check all interest and lease payments to be certain they qualify as tax deductions. All improvements made when harvesting a tract of timber such as culverts and gravel for roads or fencing should also be recorded and passed on to the bookkeeper or accountant.

"Section 179 Expensing"

In conjunction with depreciation and investment tax credit, a new deduction, entitled "Section 179 Expensing" was introduced in 1981 and applies, as an election, to any property, other than real property, depreciable under ACRS. Section 179 allows up to \$5,000 (\$7,500 in 1984-85 and \$10,000 in 1986 and later) of the cost of newly acquired assets to be deducted in the first year. The annual limit is not, however, per asset, but per taxpayer. If several assets are acquired in the same year, you may choose to allocate the Section 179 deduction among the assets or apply it entirely against the cost of one or two. If used against the cost of several smaller assets, it can render it unnecessary to keep depreciation records for these assets. If you elect Section 179 expensing, you must reduce your basis for depreciation and for investment credit by the amount you are "expensing."

"Recapture" of Section 179 Expensing is required if the asset is sold or taken out of service before the end of the second tax year following the year the 179 deduction is taken.

In addition, for 1983 and later years, whether you use the Section 179 Expensing, or choose to rely entirely on investment credit and depreciation, you must reduce your basis

for depreciation by 50% of the investment credit taken. You may, however, avoid having to reduce your basis for depreciation due to investment credit by electing a reduced investment credit rate. This is referred to as Section 48(q) Election, and under this election, the maximum investment credit is reduced from 6% to 4% for 3 year property and from 10% to 8% for other property.

These two elections (Section 179 Expensing and Section 48(q)) give the taxpayer greater choice in how he will handle his equipment for tax purposes. With greater choice, of course, comes greater complexity.

Should you
Incorporate?

Contractors often consider incorporating their business because of the potential tax advantages. At the present time, the income tax burden is the greatest on sole proprietorships or partnerships. These owners must pay taxes on a personal income tax basis which is based on a graduated scale ranging from 11 percent to 50 percent.

Corporations pay tax at the rate of 15 percent on the first \$25,000 of taxable income, 18 percent on the next \$25,000, 30 percent on the next \$25,000, 40 percent on the next \$25,000 and 46 percent on taxable income in excess of \$100,000. On the other hand, in 1982, an individual with an earned income of \$60,000 or more is taxed at the 50 percent bracket. Thus, businesses at the individual level pay more taxes than at the corporate level, which makes it more difficult to expand your business.

Sole proprietors and partnerships can take advantage of several tax deductions. The more important of these are listed below:

1. More can be contributed to retirement plans which accumulate tax-free over the years until taken out; the corporation can deduct for these payments.
2. The corporation can pay for such fringe benefits as medical and insurance plans and take deductions for them.

Amortization and Depletion

You may be able to deduct each year as amortization certain expenditures used for intangible assets such as patents, cost of incorporating and other startup costs and for improvements to leased property and reforestation expenses.

Amortization generally allows a faster write-off of your costs than depreciation does. If you can take amortization, it is a deduction in lieu of depreciation.

If you have an exhaustible natural resource, such as timber, you are allowed a depletion deduction.

Amortization

Amortization lets you recover certain capital expenditures in a way that is like straight line depreciation. Whereas depreciable assets must have a determinable life, most amortizable assets have no fixed life. Only certain specified expenditures may be amortized for federal income tax purposes. For further discussion of amortization and depletion, see Publication 535, Business Expenses.

If you want to amortize your expenditures, you must make an election to do so. The election is made by filing Form 4562, Depreciation and Amortization, and attaching a required statement to your income tax return. Unless otherwise indicated, you enter your deduction in Part II, Amortization of Property, of Form 4562.

Going Into Business

When you go into business, all costs you had to get your business started are treated as capital expenditures and are a part of your basis in the business. Any costs that were for particular assets can generally be recovered through depreciation deductions. Other costs generally cannot be recovered until you sell or otherwise go out of business.

However, you can elect to amortize certain costs that you have in setting up your business. These costs are deducted in equal amounts over a period of 60 months or more. To be amortizable in this way, costs must qualify in one of the following three areas:

- 1) Business startup costs,
- 2) Organizational expenses for a corporation, or
- 3) Organizational expenses for a partnership.

Reforestation
Expenditures

You can elect to amortize part of the amounts you spend on forestation or reforestation of property held for commercial timber production. You can amortize your direct costs for planting or seeding, including your costs for site preparation, seeds or seedlings, and labor and tools. Only \$10,000 (\$5,000 in case of a separate return by a married individual) of these costs per tax year qualify to be amortized, and each year's qualifying cost are amortized over an 84-month period. For more information, see Publication 535.

Pollution Control
Facilities

In general, you may elect to amortize the cost of a certified pollution control facility over a period of 60 months. The amortization deduction is available based on the amortizable basis of any certified pollution control facility the construction of which was completed, or which was acquired new, after 1975, provided that it is used in connection with a plant for other property that was in operation before 1976.

Certified Pollution
Control Facility

A certified pollution control facility is depreciable property that is a new identifiable treatment facility used to abate or control water or atmospheric pollution or contamination by removing, altering, disposing, storing, or preventing the creation or emission of pollutants, contaminants, wastes or heat. It must be appropriately certified by the state and federal certifying authorities.

If it appears that all or a part of the cost of a facility will be recovered from its operation such as through sales of recovered wastes, the federal certifying authority will certify to that effect, describing the nature of the potential cost recovery. The cost of the facility which may be amortized must be reduced.

Investment Credit

In addition, you will be able to claim an investment credit, if the facility has a useful life of at least 5 years.

Depletion

If you own standing timber, you may be able to take a deduction for depletion.

The depletion deduction may be available to you as an owner and an operator if you have an economic interest in standing timber.

You have an economic interest if you have a legal interest in standing timber and you have the right to income from the cutting of the timber, to which you must look for a return of your capital.

Figuring the Deduction

You may figure timber depletion only by the cost method. Your depletion is based on your cost or other basis in the timber. Your cost does not include any part of the cost of the land.

Because depletion takes place when standing timber is cut, you may figure your depletion deduction only after the timber is cut and after the quality of cut timber is first accurately measured. At the end of your tax year include in your closing inventory as a cost item any allowable depletion on cut timber that is unsold.

You figure your depletion allowance for your tax year by multiplying the number of timber units cut by your depletion unit. Your depletion unit is your cost or adjusted basis of the standing timber on hand divided by the total depletable units (such as thousand board-feet (MBF), cords, etc.).

Example

You bought a timber tract for \$160,000 and the land was worth as much as the timber. Your basis for the timber is therefore \$80,000. You figure your depletion unit to be \$80 per MBF, based on an estimated one million board feet (1,000 MBF) of standing timber. If you cut 500 MBF of timber, your depletion allowance would be \$40,000 (500 MBF at \$80 per MBF).

You claim your depletion allowance as deduction in the year of the sale or other disposition of the cut timber, unless you elect to treat the cutting of timber as a sale or exchange. In the above example, if you cut 500 MBF of your timber in 1983 and sold the logs in 1984, you would deduct your depletion allowance in 1984, the year of the sale.

Electing to treat the cutting of timber as a sale or exchange, you may elect, under certain circumstances, to treat the cutting of timber as a sale or exchange. If you make this election, subtract the adjusted basis for depletion from the fair market value of the timber at the beginning of the tax year in which it is cut to figure the gain to report on the cutting. You generally report the gain as long-term capital gain. The fair market value then becomes your basis for figuring your ordinary gain or loss on the sale or other disposition of the cut timber.

Form T, Forest Industries Schedules, must be attached to your income tax return if you claim a deduction for depletion of timber.

WOOD DELIVERY RECORDS

At most pulpmills and sawmills, every load of wood delivered is either scaled or weighed, and a delivery ticket is given to the truck driver. This usually shows (1) the buyer's load identity number and name, (2) your name, (3) the name of the species or species group delivered, and (4) the scale or weight of the load. If you operate more than one truck and have more than one driver it would be helpful for you to designate truck and/or driver identity to your copy of delivery ticket.

You will need this and other information to determine: (1) the volume cut from your own and other owner timber lots and/or the volume to be charged to a public timber sale contract, (2) the volume of wood hauled by each driver and truck, (3) the amount of money owed to you by each buyer for the wood delivered, (4) the stumpage, logging, and hauling costs, and (5) the amount of money earned.

You can make your own wood delivery ticket containing all of the needed information. See Form 6 on page 50. For a monthly accumulation record of deliveries, use Form 7 (page 52).

STUMPAGE BUYING AND INVENTORY RECORD

Form 8, (page 55), is the stumpage buying and inventory record. Use this form for all lump-sum timber sales. If you must pay different stumpage prices for several species, use a separate form for each species group. In this way, you have a monthly record of species located in one or more woodlots by the volume bought, cut, and sold; and know how much remains in inventory according to the original estimate. You will also know the cost of each species by size of timber sales. Where there is no cruise volume for individual species in a timber sale, you should make your own cruise or estimate.

RECORDING MACHINE AND WORK COSTS

To gain control of the work done by others and the money spent on your machines and equipment, you will need to keep a daily record of the expenses and the hours of work for each piece of equipment used. Use Form 9 (page 57) to record this information.

With such information you can determine: (1) the amount of work done with each piece of equipment, (2) the amount of downtime, (3) the expenses to operate and maintain the equipment, (4) a reliable rate of depreciation, and (5) whether the work capacity and type of equipment are appropriate for the operation.

The information from Form 9 is recorded on Form 10 (page 60) as a permanent record. Quick comparisons can be made between two similar pieces of equipment from the information recorded on Form 10, as well as comparisons from month to month.

Information recorded on Forms 9 and 10 serves as proof of your claim to obtain credit or refund of Federal taxes on the off or nonhighway use of gasoline, special fuels, and lubricating oils.

RECORDING BULK SUPPLIES

It is important to keep up-to-date records of the purchases and uses of bulk supplies and materials in stock. This is your control for issuing, restocking, and recognizing loss by evaporation, theft, or other means. Keep records of gasoline, diesel fuel, and other fuels on separate copies of Form 11 (page 63). Use Form 12 (page 65) to record other supplies and spare parts in storage or the supply room.

Each time you buy in bulk, add the amount to the previous balance; as you use the item, subtract the amount from the new balance. This provides a record of supplies. You need to record only the cost of bulk purchases on Form 1 as an expense and on Form 11 or 12 for control. However, record separate or weekly billing of gasoline or diesel fuel purchased at roadside service stations only on Form 1 since this fuel will not be on Form 11.

This cost-records system will be more useful if you determine your costs in terms of units of wood produced in a given time period, such as cords per hour, tons per day, or thousand board feet per month. Otherwise, you cannot compare accurately the cost of any part of your business for one period. As more wood is cut and hauled to market in a given period, the cost of each unit of wood sold usually is reduced. Even though you may want the cost information for 3-month periods, you must record each item of cost, income and production as each happens. This may mean record keeping each day.

From such complete and accurate records you will be able to examine your business carefully and make wise decisions for its improvement. Computers are being used or shared by some small firms for record keeping, billing, and payrolling.

BASIC RECORDS

On the following pages are examples of Forms 1 through 12, with specific instructions on how to use them. There are sample entries for Forms 1, 2, 3, 4, 5, 11, and 12.

Form 1 -- Record of Money Paid Out, Income

Record all business expenses and income from day to day on Form 1. Use a different form for each new month. There are 40 lines to use on Form 1 for recording expenses.

Column 2: Record the date on the check

Column 3: Record the check number

Column 4: Record the payee

Column 5: Record the amount

Column 6: Record the code number (pages 5 - 7) from the list of expense items that identify the check.

Use the code numbers on all the forms to locate all that you recorded for certain expense items during the month. For example, to determine total wages paid during the month, see Column 6 on Form 1 for code number 5. Add the amounts you recorded in Column 5 for code 5, to obtain the total wages paid during the month. If you want to know the total wages paid to each employee, assign each employee a single number beginning with 1, the next employee with 2, and so on. Add this number to the code 5. For example, the wages of employee 1 would be recorded and identified as 5.1 on Forms 1, 2 and 4.

FORM 1 - RECORD OF MONEY PAID OUT

Month _____, 19 _____

Line (1)	Date (2)	Check No. (3)	Money Paid To (4)	Amount Paid (5)	Code No. (6)
1	3	210	Jones Fuel Co. - 500 gal. gasoline		
2			24 qts. 30W motor oil		
3			1 gal. hydraulic oil	651.45	2
4	3	211	D&D Insurance Co. - truck liability, 3 months	200.00	22.10
5	4	212	Hal Friend, Cutter, week's wages, net	165.38	5.3
6	4	213	Newt Johnson, Skidder, week's wages, net	183.51	5.1
7	4	214	Tom Conway, Trucker, week's wages, net	198.67	5.2
8	4	215	Salary for myself, net	200.00	6
9	5	216	Kelley Tire Co. - 2 tires, 10:00x20, 10 ply	400.00	4.10
10	11	217	Hal Friend, Cutter, week's wages, net	187.25	5.3
11	11	218	Newt Johnson, Skidder, week's wages, net	195.81	5.1
12	11	219	Tom Conway, Trucker, week's wages, net	221.62	5.2
13	11	220	Wm. J. Conway, Contract Trucker, 3 loads @\$100	300.00	10.1
14	11	221	Salary for myself, net	200.00	6
15	15	222	Social Sec. Tax, Apr-May-Jun 1980, (my share)	132.70	15
16	15	223	Interest on time payment, truck #12	16.58	25.12
17	18	224	Hal Friend, Cutter, week's wages, net	176.56	5.3
18	18	225	Newt Johnson, Skidder, week's wages, net	193.29	5.1
19	18	226	Tom Conway, Trucker, week's wages, net	195.96	5.2
20	18	227	Salary for myself, net	200.00	6
21	25	228	Hal Friend, Cutter, weeks' wages, net	182.14	5.3
22	25	229	Newt Johnson, Skidder, week's wages, net	181.79	5.1
23	25	230	Tom Conway, trucker, week's wages, net	203.65	5.2
24	25	231	Salary for myself, net	200.00	6
25	26	232	Jones Fuel Co., 500 gal. gasoline, bulk purchase	625.00	2
26	31	233	Rent paid personal account for room used as ofc	50.00	20
27	9/1	234	Newt Johnson, Skidder, week's wages, net	183.51	5.1
28	9/1	235	Tom Conway, Trucker, week's wages, net	198.67	5.2
29	9/1	236	Salary for myself	200.00	6
30					

[illegible]

FORM 1A - RECORD OF INCOME

[illegible]

FORM 1 - RECORD OF MONEY PAID OUT

Month _____, 19 _____

Line (1)	Date (2)	Check No. (3)	Money Paid To (4)	Amount Paid (5)	Code No. (6)
1					
2					
3					
4					
5					
6					
6					
8					
9					
10					
11					
12					
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[illegible]

Form 2 -- Summary of Money Paid Out

The information on Form 2 shows you where expenses occurred and what they were charged to. This form can be used to monitor expenses by business category. For tax purposes, divide expenses into two headings: deductible and nondeductible.

At the end of the month, record on Form 2 the total amount of money paid out, which you added for each expense item recorded on Form 1. Form 2 becomes your monthly summary of all money paid out and charged to the five costs of business. Expenses up to the month, and total to date from the beginning of the year, are shown on the sample.

You may want to maintain tighter control of expenses such as utilities. To do this use separate code numbers items such as electricity, heat, fuel oil, telephone, and water.

Column 1: These are the same code numbers listed on pages 5-7 for expense items.

Column 2: These are the same expense items listed on pages 5-7. You can cross out or change the types of expense items, both on Form 2 and in the list on pages 5-7. Any changes made should read the same on both the list and the form. For your ease, the expense items are listed in groups as they occur in normal business operations.

Column 3 through 7: For closer business control, each expense item listed during the month should be identified on Form 1 so that you can add each monthly total by the five major business costs. You can do this by use of the code numbers.

Some expense items can be charged to more than one business cost. For example, the gasoline expense can be separated and charged to each of the five business costs based on the amount of gasoline used for each business cost during the month. When the proper share of an expense item is charged to all of the proper business costs as actually occurring, you have the means of closely controlling your business.

Column 8: Add the amounts recorded in Columns 3 through 7 and record the total amount in Column 8.

Lines 1-36: These are the same expense items listed on pages 5 - 7.

Line 37-39: Record additional expense items here.

Line 40: Total deductible expenses paid: add the amounts of all expense items shown on lines 1 through 39 in Column 3, and record the total on this line. Do the same for Columns 4 through 8.

Lines 41-46: Any principal paid on debts during the month can be recorded in Column 8. Knowing the purpose for which the money was borrowed, you can properly separate the total principal paid and record the proper shares in Columns 3 through 7. From Form 1, record on Line 44 the amount of any tax paid on business income during the month, such as the quarterly estimated tax and at the end of the year. For better business control, you can divide the quarterly tax paid into three equal parts and record for each month of the quarter year.

The sample Form 2 shows total paid up to this month, total paid this month, and total paid to date.

FORM 2 - SUMMARY OF ALL MONEY PAID OUT

Month _____, 19 _____

NO. (1)	DEDUCTIBLE EXPENSE PAID (2)	EXPENSES CHARGED TO					
		Manage- ment (3)	Logging (4)	Hauling (5)	Road Work (6)	Contract Work (7)	Total (8)
1	Diesel Fuel	\$	\$	\$	\$	\$	\$
2	Gasoline	6.40	121.70	152.40	49.50		330.00
3	Oils, Greases, Other Lubricants		3.65	12.00			15.65
4	Small Tools and Spare Parts	10.00					10.00
5	Wages and Salaries - Workers		409.00	796.00	35.00		1240.00
6	Your Salary or Drawing Allowance	160.58	97.50	78.65	21.42	9.75	367.90
7	Maintenance, Repair Costs, Equipment			170.00			170.00
8	Maintenance, Repair Costs, Buildings						
9	Road - Building & Maintenance Costs	45.00			236.50		281.50
10	Contract Logging Costs		158.00				158.00
11	Travel Expenses - Personal	165.36					165.36
12	Travel Expenses - Workers						
13	Stumpage Costs	1322.00					1322.00
14	Tax - Federal Use on Trucks			78.00			78.00
15	Tax - Social Security		21.20	28.11			49.31
16	Tax - State Unemployment		22.00	28.00			50.00
17	Tax - Real Estate						
18	Tax - Timberlands						
19	Utilities	2.00					2.00
20	Rent for Room at Home	50.00					50.00
21	Rents and Leases						
22	Insurance - Fire, Liability, etc.			200.00			200.00
23	Insurance - Workmen's Compensation						
24	Interest - Loans & Notes	60.00					60.00
25	Interest - Equipment, Purchases	16.58					16.58
26	Licenses, Fines and Toll Fees						
27	Fees - Bookkeeping	10.00					10.00
28	Fees - Business Consulting						
29	Fees - Legal						
30	Office Supplies, Furniture						
31	Depreciation - Buildings						
32	Depreciation - Equipment	23.50	112.00	112.42	24.30		272.22
33	Dues and Donations						
34	Entertainment						
35	Subscriptions						
36	Advertising						
37							
38							
39							
40	Total - Deductible Expenses Paid	1871.42	945.05	1655.58	336.72	9.75	5848.52
	NON-DEDUCTIBLE EXPENSES PAID						
41	Principal Paid on Loans and Notes						
42	Federal Income Tax - Business Income						
43	Total - Non-deductible Expenses Paid	0	0	0	0	0	0
44	Total - Paid This Month	1871.42	945.05	1655.58	336.72	9.75	5848.52
45	Total - Paid Up To This Month	19099.93	5845.00	10720.40	9113.30	4755.25	49533.88
46	Total - Paid to Date (From 1 Jan.)	20971.35	6790.05	12375.98	9480.02	4765.00	55382.40

FORM 2 - SUMMARY OF ALL MONEY PAID OUT

Month _____, 19 _____

NO. (1)	DEDUCTIBLE EXPENSE PAID (2)	EXPENSES CHARGED TO					
		Manage- ment (3)	Logging (4)	Hauling (5)	Road Work (6)	Contract Work (7)	Total (8)
1	Diesel Fuel	\$	\$	\$	\$	\$	\$
2	Gasoline						
3	Oils, Greases, Other Lubricants						
4	Small Tools and Spare Parts						
5	Wages and Salaries - Workers						
6	Your Salary or Drawing Allowance						
7	Maintenance, Repair Costs, Equipment						
8	Maintenance, Repair Costs, Buildings						
9	Road - Building & Maintenance Costs						
10	Contract Logging Costs						
11	Travel Expenses - Personal						
12	Travel Expenses - Workers						
13	Stumpage Costs						
14	Tax - Federal Use on Trucks						
15	Tax - Social Security						
16	Tax - State Unemployment						
17	Tax - Real Estate						
18	Tax - Timberlands						
19	Utilities						
20	Rent for Room at Home						
21	Rents and Leases						
22	Insurance - Fire, Liability, etc.						
23	Insurance - Workmen's Compensation						
24	Interest - Loans & Notes						
25	Interest - Equipment, Purchases						
26	Licenses, Fines and Toll Fees						
27	Fees - Bookkeeping						
28	Fees - Business Consulting						
29	Fees - Legal						
30	Office Supplies, Furniture						
31	Depreciation - Buildings						
32	Depreciation - Equipment						
33	Dues and Donations						
34	Entertainment						
35	Subscriptions						
36	Advertising						
37							
38							
39							
40	Total - Deductible Expenses Paid						
	NON-DEDUCTIBLE EXPENSES PAID						
41	Principal Paid on Loans and Notes						
42	Federal Income Tax - Business Income						
43	Total - Non-deductible Expenses Paid						
44	Total - Paid This Month						
45	Total - Paid Up To This Month						
46	Total - Paid to Date (From 1 Jan.)						

Form 3 -- Monthly Profit and Loss Statement

At the end of each month, record in Column 2 of Form 3 the total income shown on Form 1. In Column 3, record the total expenses shown on Form 2 (Column 8, line 40). Subtract expenses from income to obtain the profit or loss for the month and record in Column 4. The figure in Column 4 does not include income tax or payment on principal, but does include depreciation.

The figure entered in either Column 4 or 5 shows you immediately whether your business is operating at a profit or a loss for any month and for the year. You also can compare between months in the same or in different years, and between years.

At the end of January, record in Column 5 the same amount recorded in Column 4. This is the total profit or loss to date for the new year. Each month, add any profit or subtract any loss recorded in Column 4 to the amount shown in column 5 for January. Thus, the amount shown in Column 4 is the profit or loss for the month, and the amount in Column 5 is the total profit or loss to date.

If your business year differs, revise Form 3 accordingly.

FORM 3 - MONTHLY PROFIT AND LOSS STATEMENT

Month (1)	Total Income (2)	Total Expenses (3)	Net Profit (P) or Loss (L) for Month (4)	Total Profit (P) or Loss (L) to Date (5)
January	6,050	5,040	1,010(P)	1,010(P)
February	4,090	5,000	10(L)	1,000(P)
March	7,180	5,230	1,950(P)	2,950(P)
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL FOR YEAR				

FORM 3 - MONTHLY PROFIT AND LOSS STATEMENT

Month (1)	Total Income (2)	Total Expenses (3)	Net Profit (P) or Loss (L) for Month (4)	Total Profit (P) or Loss (L) to Date (5)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL FOR YEAR				

Form 4 -- Employee Payroll and Work Record

Form 4 serves as a time sheet, a method for computing wages and deductions, and as a check register. The hours of work or the piecework by each employee should be recorded at the end of each work day. Wages, withholdings, and deductions must be computed at the end of each week. The employee is paid his net wages from this record.

Use one page for each employee for one quarter of the year. In doing so, you have weekly, monthly, and quarterly totals of hours worked, or units of wood produced, wages paid, and withholdings made.

Column 1: Enter the date of the work week for each week that the employee worked during the month. For example, enter July 1-7 in the first box; in the box below enter July 8-14; in the box below that enter July 15-21; in the next box July 22-28. For August enter July 29 to August 4.

Column 2-8: Record in the box, for each day, the number of hours the employee worked. Also record the number of hours of overtime. For example, on Saturday, July 14, you pay overtime. In Column 8, total hours should be recorded as 34-7.

If your employee is paid by piecework, record the volume in units of wood for each day worked. If you pay at a higher rate for producing more than a fixed daily amount, record the extra volume produced in the same way as for overtime. For example, employee cut daily quota of 8 cords and then 2 additional cords. Record employee's production as 8-2.

To control your costs and the work done by each employee during the day you can record, in the blank boxes below the hours worked, the Expense Codes (pages 5 - 7). For example: your truck driver delivered a load of wood to a mill in 2 1/2 hours, worked 5 1/2 hours bulldozing skid-trails and filling in a large mudhole in one trail, and delivered another load of wood in 2 hours. Below the figure 2 1/2 enter 3b; under 5 1/2 enter 4b; and under 2 enter 3b.

Column 9: Record the pay rate for regular hours or volume of work. In the same box below, record the pay rate for overtime or extra volume.

Column 10: Multiply the regular hours worked (Column 8) by the rate of pay (Column 9). Do the same for overtime hours or for piecework. Add the two totals and record the figure here.

For each employee, separate and record the total wages that were earned working with and without a machine. This is important in determining the exact cost of operating the machine (see instructions for Form 10).

Column 11: On the basis of the employee's number of tax exemptions and total wages earned, determine the amount of money to withhold and record here. Tables of withholding are available from the Internal Revenue Service, your bank, or your Timber Producers Association. You can have your bank set up a special account called a Federal Depository Account. All sums of money withheld and deducted from all employee wages must be kept in this account.

Federal Tax Deposits of Withheld Federal Income Tax and FICS (Social Security taxes). The size of your payroll determines how often you must make federal tax deposits. These "deposits" are payments to IRS of withheld taxes which are made at your bank by presenting a depository coupon (obtainable from IRS) along with your check, and if your payroll is large, with over \$3,000 withheld, you will have to deposit after every payday. See instructions to Form 941, "Employer's Quarterly Federal Tax Return" for more details on deposit requirements.

Column 12: You deduct this tax from each employee's total wages earned by following the instructions available from the IRS. Ask for "Your Business Tax Kit;" it contains instructions and necessary reporting forms for Social Security and income tax payments. Hold this tax money in your special depository account. If you are holding more than \$500 at the end of the first or second months of the quarter, you must pay this tax by the 15th of the following month.

Column 13: If there is a State income tax law in your state, you must withhold the tax from an employee's gross wages. Ask your state tax agency for instructions and assistance. Compute the amount of tax to be deducted and record it here. As with the Federal tax, this money should be kept in a special bank account on the same quarterly basis.

Column 14: Premiums for any health and accident insurance that you set up can be paid entirely by you or your employees. Or, by agreement, you might pay only a percentage. If you pay all or part of the premiums, record the amount as a business expense on Form 1. If the employees want any portion of the premiums that they pay deducted from their wages, make the deductions and record the amount in Column 14.

Column 15: Record the amount of any pay advance here.

Column 16: Record here the amount of money withheld for county or municipal wage taxes or for other purposes. You can obtain instructions and reporting forms at your bank or local tax office. This money also is in your business checking account. Pay with a check when you submit the reporting form.

Column 17: Add the amounts recorded in Columns 11 through 16 and subtract the total from the figure in Column 10 and record here. Pay the employee this net wage with a check. The cancelled check is your proof that the employee was paid.

Column 18: Record here the serial number of each paycheck. You can quickly locate the cancelled check by the serial number should any question be raised later.

As the employer, you are required by law to have on file for each employee, a copy of the Employee's Withholding Allowance Certificate, IRS Form W-4. On this certificate, the employee enters the number of tax exemptions for family members to be reported to the Government.

Do not allow any employees to begin working for you until they fill out Form W-4 and show you their Social Security card. From the card, record their Social Security identification number on your Employee Payroll and Work Record, which you prepare for their work record.

The controls for your payroll are the work records and your cancelled checks. You and your employees may wish to acknowledge that a check was issued. Have employees place their initials in Column 18 under the check number.

For convenient identification, record at the top of Form 4,
after the employee's name, the employee number you assigned.

EXAMPLE: FORM 4 - EMPLOYEE PAYROLL AND WORK RECORD

Employee's Name: Harold Friland (.3) Address: RD #1, Old Town Social Security No.: 136-18-7817 Number of Withholding Exemptions: 4

Employee's Name: Harold F. Bond (137)										Months: 3		Quarter Number: 3		July		August		September		Exemptions:	
Work week	WORK RECORD							Total hours or units (8)	Rate of pay per (9)	Total wages earned (10)	WITHHOLDINGS AND DEDUCTIONS						Pay advance (15)	Other (16)	Net wages paid (17)	Check number (18)	
	Mon. (2)	Tues. (3)	Wed. (4)	Thur. (5)	Fri. (6)	Sat. or Sun. (7)	Social security (11)				Federal income tax (12)	State income tax (13)	Hospital medical ins. (14)								
(1)																					
July -7	6	7	6	8	7		34	\$6.50	\$ 221.00	\$ 13.55	\$ 15.89	\$ 1.50	\$ 13.50				\$ 176.56	11			
8-14	7	6	7	7	7	(7)	34	6.50 (7.20)	221.00 (50.40)	16.64	19.51	1.85	13.50				219.90	40			
15-21	6	9	5	7	8		35	6.50	227.50	13.95	16.36	1.55	13.50				182.14	81			
22-28	9	6	7	5	8	(8)	35	6.50 (7.20)	227.50 (57.60)	17.48	20.50	1.94	13.50				231.68	115			
Month Total							153		1,005.00	61.62	72.26	6.84	54.00				810.28				
July 29-August 4	6	6	6	7	7		32	6.50	208.00	12.75	14.96	1.41	13.50				165.38	212			
5-11	7	7	7	7	8		36	6.50	234.00	14.34	16.82	1.59	13.50				187.75	217			
12-18	7	6	6	7	8		34	6.50	221.00	13.55	15.89	1.50	13.50				176.56	224			
19-25	6	7	6	8	8		35	6.50	227.50	13.95	16.36	1.55	13.50				182.14	228			
Month Total							137		890.50	54.59	64.03	6.05	54.00				711.83				
August 26-Sept. 1	8	6	6	7	7		34	6.50	221.00	13.55	15.89	1.50	13.50				176.56	246			
2-8	7	8	6	7	8		36	6.50	234.00	14.34	16.82	1.59	13.50				187.75	253			
9-15		8	7	8	6		38	6.50	247.00	15.14	17.76	1.68	13.50				198.92	269			
16-22	6	8	6	7	5		32	6.50	208.00	12.75	14.96	1.41	13.50				165.38	278			
23-29	7	6	7	7	8		35	6.50	227.50	13.95	16.36	1.55	13.50				182.14	318			
Month Total							175		1,137.50	69.73	81.79	7.73	67.50				910.75				
Quarter Total							465		3,033.00	185.94	218.08	20.62	175.50				2,432.86				

Form 5 -- Auto, Truck, and Equipment Depreciation Record

Column 1: Enter the kind and model of equipment that you will use for two or more years.

Column 2: Enter the month and year that you bought the equipment.

Column 3: Enter the actual cost of the equipment.

Column 4: Enter your estimate of the trade-in value of the equipment.

The dealer can give you an estimate, but you alone must decide. For ACRS use zero. As owner, you can better judge what the equipment is worth after you have used it for a certain number of years.

Column 5: Subtract the value in Column 4 from that in Column 3 and enter here.

Column 6: On the basis of your estimate of how long the equipment will last enter the years of service expected.

Column 7: Divide the figure in Column 5 by the number of years in Column 6 to obtain the yearly depreciation throughout the service life of the equipment.

Column 8: In the first year there is no past depreciation, so you show none. For second year, add the value shown in Column 7 and enter in Column 8. Thus, for the skidder in this example, zero plus \$8,400 = \$8,400. For the third year, \$8,400 + 8,400 = \$16,800; for the fourth year, \$16,800 + 8,400 = \$25,200.

Column 9: For each year, subtract Columns 7 and 8 from Column 5 and enter here. As a check, the values for each line in Columns 7 through 9 added together must agree with the figure in Column 5.

Column 10: Divide the figure in Column 8 by the number of months in the year that you had the equipment. For example, skidder: $\$8,400 \div 12 \text{ months} = \700.00 . Each month, add the monthly depreciation costs (Column 10) for all of the equipment on this record, and enter the total amount on line 32 of Form 2. Record the monthly depreciation on buildings used for business on line 31 of Form 2.

For tax purposes, under ACRS, the month an asset, other than a building, is placed in service is immaterial. Because of the statutory percentages and "half year convention" incorporated in ACRS equipment placed in service in December will get the same depreciation as equipment placed in service in January of the same year.

Columns 11 and 12: Consult your local tax office for these credits or see IRS Publication 572.

FORM 5 - AUTO, TRUCK AND EQUIPMENT DEPRECIATION (REPLACEMENT) RECORD

Description of Equipment (1)	Date Equipment Bought (2)	Purchase Cost (3)	Estimated Trade-In Value (4)	Balance for Depreciation (5)	Estimated Years of Service (6)	Depreciation of Past Years (7)	Depreciation for Each Year (8)	Depreciation Remaining (9)	Depreciation for Each Month (10)	State Investment Credit (11)	Federal Investment Credit (12)
Skidder 1/ JD-440	year 1	\$42,000	\$8,400	\$33,600	4	(yr 1) \$8,400 (yr 2) 8,400 (yr 3) 8,400 (yr 4) 8,400	(yr 1) ----- (yr 2) \$ 8,400 (yr 3) 16,800 (yr 4) 25,200	(yr 1) \$25,200 (yr 2) 16,800 (yr 3) 8,400 (yr 4) ----- Year 5 Trade in for new	\$700.00		
Ford Truck 1/2 ton pick-up 2/	year 1	\$6,600	-----	6,600	3	(yr 1) \$1,650 (yr 2) 2,508 (yr 3) 2,442	(yr 1) ----- (yr 2) \$1,650 (yr 3) 4,158	(yr 1) \$ 4,950 (yr 2) 4,158 (yr 3) -----	\$137.50 209.00 203.50		

1/ Depreciation for skidder is straight line

2/ Depreciation for Ford truck is Accelerated Cost Recovery System

FORM 5 - AUTO, TRUCK AND EQUIPMENT DEPRECIATION (REPLACEMENT) RECORD

Description of Equipment (1)	Date Equipment Bought (2)	Purchase Cost (3)	Estimated Trade-In Value (4)	Balance for Depreciation (5)	Estimated Years of Service (6)	Depreciation of Past Years (7)	Depreciation for Each Year (8)	Depreciation Remaining (9)	Depreciation for Each Month (10)	State Investment Credit (11)	Federal Investment Credit (12)

Form 6 -- Wood Delivery Ticket or Receipt

The wood delivery ticket should be filled out for each load of wood hauled. The driver of each delivery truck should have a book of these forms. It is best that the driver fill out the form for each load before leaving the woods. If you operate with one or two trucks and wish to keep the record, you can complete the forms. You can take some of the information from buyer's delivery tickets. Other needed information can be obtained from the truck driver. Always check your figures against those of the buyer.

You can use Form 6 either as single or double copy. If you decide to use the double copy method, use carbon paper between the copies. The driver should keep one and give you the carbon copy. Driver should give you your copies at the end of each day or week. For each truck, the load must be numbered in the order of 1, 2, 3 and so on, without a skip for the year. For example, you have three trucks. Beginning on January 2 of a new year, the first load hauled by each truck is numbered 1 on Form 6. The next load is number 2, and so on. Thus with the permanent truck identification number you also assign on the copies, you can be alert to lost or missing copies for each truck and ask the driver about them (see instructions for Form 9).

Keep your copies in a separate folder until you receive payment for the load of wood. Then stamp or mark the form "Paid" and enter the date paid, and attach the copy to Form 1 for weekly and monthly control. You can make a quick check of unpaid deliveries by looking into the folder.

FORM 6 - WOOD DELIVERY TICKET

Date _____ Your Load Number _____

Kind of Wood Delivered _____ Your Truck Number _____

Pulp _____ Sawlog _____ Veneer _____ Other (Write in) _____

Species _____

Wood Lot Name _____

Wood Delivered To _____

Mill: Scale or Weight Slip Number _____

Scale Volume _____ Weight _____

Railroad Car: Number _____

Scale Volume _____ Weight _____

Deck: Location _____

Scale Volume _____ Weight _____

Miles (Round Trip) _____

Measurements for Approximate Scale
(Before truck leaves woods):

Length (Ft.) _____ Height (Ft.) _____ Width (Ft.) _____

Loading and Hauling Time:

Truck Leaves Woods _____ Time Wood Delivered _____

Time Truck Returned _____ Loading Time _____

Major Delay: Cause _____ Time _____

Form 7 -- Wood Delivery Record

You may want to keep a complete record of your wood deliveries for the month on one form instead of using a wood delivery ticket for each load of wood delivered to buyers; for this, use Form 7. Or, you may want closer control of your wood hauled and sold. You can keep the information taken from the Form 6's and record on separate Form 7's by each woodlot, buyer, haul truck, loader, etc. Also, the record on Form 7 serves as summary for all of the information recorded on the Form 6's.

If you do not use Form 6 for each load you can get information from the buyer's wood receipts and from your truck driver to complete Form 7.

Form 8 -- Stumpage Buying and Inventory Record

Keep a separate form for each woodlot that you purchase. Or you may keep a record by species or species groups. You will then have complete control information for your stumpage and wood sales by the method selected. As the end of each month, record the stumpage and wood cut information on Form 8 as follows:

Column 2: For the first month of cutting on a new woodlot, record the cruise or estimated volume of the species bought (obtained from timber sales contract or your own estimate). For the succeeding months, record here the volume shown in Column 6 of the preceding month.

Column 3: Record the actual volumes cut by your cutters as reported on the Form 4's for the month.

Column 4: Record the actual volume delivered and paid for as shown on Forms 6 and 7 for the month.

Column 5: Record the volume cut but not delivered. This is wood still piled in the woods or at landings (Column 5 previous month + Column 3 - Column 4 = Column 5).

Column 6: Record on the volume bought and still standing (Column 2 - Column 3 = Column 6).

Column 7: To determine the stumpage cost for each month for a lump sum payment, divide the sum paid, which you show at the left of this form, by the volume purchased, either cruise or estimated. Multiply this unit cost by the volume cut during the month (from Column 3).

To determine monthly stumpage cost for a purchase by volume unit, multiply the cost per volume unit, which you show at the left of the form, by the volume cut during the month (from Column 3).

Column 8: Record from Form 7 the amount of money you received for the loads you sold from this woodlot.

At the end of each year: (1) add the monthly costs and timber volumes cut, delivered, and inventory to obtain totals for the year; (2) subtract the total volume cut from the volumes purchased, which helps you determine your inventory of standing timber; and (3) subtract the total volume delivered from the total volume cut to determine your inventory of timber cut but not delivered.

If you contract to cut and haul timber owned by someone else, you can use Form 8 to keep a record of the timber volume assigned to you, what you cut and delivered, your costs, and what you are paid. To use the form:

1. Cross out "Stumpage" in the heading "Stumpage Cost" and enter "Contract." This heading appears at the left of the form.
2. Cross out the work "Bought" in the heading of Column 2, and write in "Assigned."
3. Change the heading for Column 7 to read, "Cost of Wood Cut and Hauled."
4. Follow the instructions given for the loggers who buy and cut their own stumpage.

FORM 8 - STUMPAGE BUYING AND INVENTORY RECORD

Species _____

Woodlot Name _____

Identification No. _____

Location _____

Date Timber Bought _____

Date Cutting Started _____

Date Cutting Ended _____

Stumpage Cost _____

Paid Per Volume
Unit When Cut - \$ _____

Paid Lump Sum - \$ _____

Timber Measured In:

Thousand Board Feet _____

Weight _____ Cords _____

Cubic Feet _____ Other _____

Log Rule Used _____

Timber Marked by Forester:

Yes _____ No _____

Month (1)	Stumpage Volume Bought (2)	Stumpage Volume Cut (3)	Volume Delivered (4)	Volume Cut & Not Delivered (5)	Inventory Volume of Stumpage (6)	Cost of Stumpage Cut & Sold (7)	Money Received (8)
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
TOTALS							

Form 9 -- Daily Machine Cost and Work Record

This form should be filled out daily by the driver of each truck and machine. The form may be used as a single copy or in duplicate. If you decide to keep the records in duplicate, the driver can use carbon paper between two copies of the form. The pencil copy remains in the vehicle and the driver gives you the carbon copy at the end of the day or the week when wages are paid. Either copy serves as a check if one copy is lost. The driver's copy serves as a reminder of previous work and preventive maintenance on the machine.

For control, assign and paint a permanent number on each truck and machine that you own. Use this number to identify the vehicle on all the forms in this cost record system. For example, if you own three trucks, two skidders, and one loader, number the trucks 1, 2 and 3; the skidders 4 and 5; and the loader as 6. In this way, you and your employees can identify each machine by its number. You may want to use numbers 11, 12, 13, etc. for equipment and 1 through 10 for your employee code numbers.

On Form 9, the driver or operator must enter the kind of machine, such as fork truck, skidder, or tractor. The assigned machine number, the date, and the service meter and/or odometer reading are entered on the form. Subtract the reading for the previous day from the reading for this day to get Total Miles Traveled.

The amount used of items such as gasoline and oil is entered. The unit cost, total cost, and cost of any repairs can be determined at the end of the week.

The operator records the number of hours worked with the machine under "Day's Work." (You decide how accurately the time is to be shown.) Record the hours of other kinds of work performed without the machine. Also the kind of preventive maintenance performed on the machine is entered. Under "Remarks," the operator records any other useful information.

FORM 9 - DAILY MACHINE COST AND WORK RECORDS

Machine _____ Machine No. _____
 Machine Meter Reading (End of Day) _____
 Total Miles Traveled _____ Date _____

ITEM	Amount Used	Unit Cost	Total Cost
Gasoline (gallons)			
Oil, Motor Lube (quarts)			
Oil, Hyrdaulic (quarts)			
Diesel Fuel (gallons)			
Grease (pounds)			
Filters (number)			
Tires (number)			
Cost of Repair Parts			
Cost of Repair Labor			
TOTAL			
Day's Work			
Machine Hours _____ Operator's Other Work _____ Hours _____	Preventive Maintenance Done _____ Hours _____		
Major Delay: Cause _____ Time _____			
Volume of Wood:			
<div style="display: flex; justify-content: space-between;"> <div> Cut Loaded Hauled _____ Hauled _____ </div> <div> _____ _____ _____ </div> </div>			
Miles of Road Built _____			
Miles of Road Maintained _____			
REMARKS			

Form 10 -- Monthly Machine Cost and Work Record

Record here for each truck and machine, the monthly total of the daily cost and work information from the Form 9's. Add the total for each expense and work done for machine 1 and record the totals on line 1 of Form 10. Do the same for machine 2 and record the monthly totals on line 2 of Form 10. There are 20 lines on Form 10 to represent as many machines.

You now have information each month for the same machine on the same line on Form 10 for comparison and control. The information recorded on this form will show you the downtime and the hours of actual work for each machine, the volume of wood cut and moved by the machine and the cost of doing the work.

Column 1: Use the same numbered line on the form as the number you assigned to each truck or machine.

Columns 2, 4, 6, 8, 10 12, 14, 16: From the Form 9's for each machine add the monthly total of each item and record in the proper column. If you install one filter in truck 1, enter 1 in Column 12; if 312 gallons of gasoline were used, enter this figure in Column 2 and so on.

Columns 3, 5, 7, 9, 11, 13, 15 and 17: From the Form 9's, add the monthly total for each item and record in the proper column the cost paid out. Do this in the same way as for the amounts used.

Columns 18 and 19: Show monthly repair costs for the machine: the total cost for the repair parts in Column 18 and the total repair labor cost in Column 19.

Column 20: To obtain a quick service or mileage total for the machine at the end of the month, subtract from the meter reading at the end of the last day of the current month, the reading for the last day of the previous month. The readings are shown on Form 9 for the last day of current and the past month. For example, the meter reading for truck 1 at the end of current month was 9,174 and the reading for last month was 7,852. Thus, $9,174 - 7,852 = 1,322$ miles that truck 1 traveled this month. Miles traveled daily can be recorded on both Forms 6 and 9.

Column 21: From Form 9, add the actual hours of work with the machine during the month and record here.

Column 22: Add the costs for the expense items recorded on the line of Form 10 and record the monthly total for the machine.

Column 23: Record here (from Form 4, Column 10) the total gross wages the employee earned for the hours worked with the machine.

To obtain hourly operating cost for a machine during the month, divide the total monthly costs plus wages by the total machine hours worked.

Hourly operating cost for the machine =

$$\frac{\text{Columns 22 + 23 + monthly depreciation}}{\text{Column 21}}$$

To obtain the operating cost per mile for a truck during the month, divide the total monthly costs plus wages by the total miles.

Operating cost per mile =

$$\frac{\text{Columns 22 + 23 + monthly depreciation}}{\text{Column 20}}$$

Month _____, 19____

[illegible]

Form 11 and 12 -- Record of Bulk (Fuel) Bought and Used;
Items from Bulk Storage or Supply

The record Forms 11 and 12 are the same for supplies of gasoline, diesel and other fuels, but differ somewhat for other bulk supplies. The instructions for gasoline also can be used for diesel oil and other fuels. Enter the type of fuel used in blank space of the title on Form 11.

Begin use of these forms by entering the last figure in Column 7 for the previous month in the upper right blank, "Balance from past month _____." This is 410 gallons on the sample form. You may wish to measure the quantity in storage at the beginning of the month and use the actual figure.

- Column 1: Record the date whenever a supply is bought or taken from storage tank.
- Column 2: Record here only the gallons bought for bulk supply.
- Column 3: When a bulk supply is bought, record the name of the supplier and the total purchase cost. When taking from storage, record the kind of machine, its number, and the cost code number of the job. For example: Log Truck, Number 12, (3b2). This means that the gasoline put into Truck 12 will be used for hauling wood (3b) from woodlot 2. If you are logging from more than one woodlot during the year, it is necessary to separate records of expenses and income for each woodlot.
- Column 4: Record the number of gallons taken from storage and pumped into the machine.
- Column 5: Record the price per gallon, which is shown on the sales receipt you received from the supplier. This price per gallon usually is inaccurate if the price changes often and if you have a large capacity storage tank which you do not refill often. You may want to determine the price per gallon for such a mixture of prices each time the tank is refilled with some remaining in the tank. For example, the storage capacity on your tank is 1,200 gallons. A delivery of 925 gallons is made at \$1.30 per gallon.

The tank has 265 gallons priced at \$1.25 per gallon. The price per gallon for the mixture which you would use until the next delivery is:

$$\frac{925 \times \$1.30 + 265 \times \$1.25}{1,190} =$$

$$\frac{\$1,202.50 + 331.25}{1,190} =$$

$$\frac{1,533.75}{1,190} = \$1.29$$

Column 6: Multiply the price per gallon by the number of gallons pumped into the machine (Column 5 x Column 4 = Column 6).

Column 7: For the first change in inventory, subtract the Column 4 figure from, or add the figure in Column 2 to, the Gallons in Storage. For each use or addition, continue to subtract gallons used and add gallons bought to obtain the new balance.

EXAMPLE: FORM 11 - RUNNING RECORD OF BULK Gasoline BOUGHT AND USED

Month _____, 19____

Balance from past month 410

Date (1)	Gallons Bought (2)	Used for: (Write kind of truck or equipment and its assigned identification number) (3)	Gallons Used (4)	Price Per Gallon (5)	Cost of Gallons Used (6)	Gallons in Storage (7)
3	-	Log Truck No. 12 (3b2)	90	\$1.10	\$99.00	320
3	-	Chain Saw No. 13 (2a2)	5	1.10	5.50	315
4	-	Loader No. 11 (2d2)	50	1.10	55.00	265
8	925	Jones Fuel Co. (\$1,063.75)	-	1.15	-	1,190
8	-	Logging Crew Truck No. 14 (2a2)	18	1.15	20.70	1,172

FORM 11 - RUNNING RECORD OF BULK _____ BOUGHT AND USED

Month _____, 19____

Balance from past month _____

[illegible]

EXAMPLE: FORM 12 - RUNNING RECORD OF ITEMS FROM BULK STORAGE OR SUPPLY ROOM

Date (1)	Name of Item (2)	Item Used For (Type of Equipment and Number) (3)	Units Used (4)	Unit Price Paid (5)	Total Cost (6)	Units in Storage (7)
3	Motor Oil SAE 30	Log Truck #12 (3b2)	8 qts.	1.00	8.00	Past Month: 48; 40
3	Motor Oil SAE 10	Chain Saw #13 (2a2)	1 qt.	1.00	1.00	Past Month: 24; 23
3	Chain Saw	Chain Saw #13 (2a2)	1 ea.	22.00	22.00	Past Month: 4; 3
4	Motor Oil SAE 30	Loader #11 (2d2)	10 qts.	1.00	10.00	30
4	Grease	Loader #11 (2d2)	21 lbs.	.75	15.75	Past Month: 25; 4
8	Motor Oil SAE 30	Logging Crew (2a2) Truck #14	8 qts	1.00	8.00	22

FORM 12 - RUNNING RECORD OF ITEMS FROM BULK STORAGE OR SUPPLY

[illegible]

USING YOUR RECORDS TO MAKE BUSINESS DECISIONS

The cost-record system can be used in two parts. The first part includes the basic record forms (1 through 5) and your business checking account. Using these forms, you have a complete record of your business costs and income. With this information you can complete your business and income tax returns.

The second part provides information you can use to determine the specific cost per unit of wood for any part of your business. You can use the recorded information from any of the forms depending on the specific cost you wish. Some examples are:

1. Timber logging costs per unit of wood cut can be obtained for the month by dividing the total cost in Column 4, line 40, of form 2 by the total volume of wood delivered, recorded on Form 7.
2. Timber hauling costs per unit of wood cut can be obtained for the month by dividing the total cost in Column 5, line 40, of Form 2 by the total volume of wood delivered (Form 7).
3. Road building and/or maintenance costs per mile can be obtained for a month by dividing the cost shown in Column 6, line 40, of Form 2 by the number of miles recorded each day on Form 9.
4. Cost per unit of wood for the month for any one expense item recorded on Form 2 can be obtained directly from Column 7 on Form 8.
5. Timber stumpage cost per unit of wood for individual species can be obtained from Column 7 on Form 8.
6. Timber hauling costs per unit of wood per mile for the month can be obtained by dividing the total hauling cost in Column 5, line 40, on Form 2 by the total volume of wood delivered to the buyer. The volume of wood is obtained by adding the daily volumes shown on Form 6. Divide this hauling cost per unit of wood by the total miles traveled to deliver the wood. The total miles are obtained by adding the daily miles recorded on Form 6. The hauling cost per hour is obtained by dividing the cost by the total hours shown on Form 7.

For example, truck 2 hauls 10 cords of wood each trip. During the month, 31 trips of 28 miles each (round trip) were made, or a total of 868 miles. The volume of wood delivered is $31 \times 10 = 310$ cords. Each round trip took 2 hours, or $31 \times 2 = 62$ hours. The total hauling cost recorded is \$1,560 for the month including depreciation on the truck. Thus:

$\$1,560$ divided by 310 = \$5.03 hauling cost per cord

$\$5.03$ divided by 868 = \$.0058 or just over 1/2 cent per mile per cord.

$\$1,560$ divided by 62 = \$25.16 per hour hauling cost.

Caution: These figures may change drastically with changes in distances or downtime.

Additional Business Decisions

Your records also can help you determine:

1. The volume of veneer logs, sawlogs, and pulpwood, by grade and species, that is cut and hauled from your woodlots. You can determine how well you are meeting your sales contracts and when you should buy more stumpage.
2. The accuracy of the timber cruise volumes or estimates made.
3. Whether the capacity of your equipment or size of your crew, or both, is adequate to meet your sales contracts.
4. Accurate work descriptions for each employee and the work pattern in the woods. Such information can point out safety habits and lead the way to lower insurance rates.
5. The price to bid for stumpage
6. The selling price of products.
7. The contract price for logging.

For the last three uses carefully add to the costs shown on line 40 of Form 2 a reasonable profit which may include.

- a. Income taxes
- b. Interest on money invested in the business.
- c. Risk.

Handling Depreciation
Money

The amount of money shown on lines 31 and 32 of Form 2 can be: (1) placed in a separate savings account, (2) used for current expenses, (3) used to buy new equipment, (4) used to pay for equipment bought on time, and (5) used to buy additional stumpage or for other uses.

If the business is operated largely with borrowed money and equipment purchased on time, there may be periods of bad markets or weather when insufficient cash is received to meet all payments even there depreciation is used for these payments due.

If equipment is purchased and current operating expenses are paid from an inheritance or sale of other property or business, protection of depreciation is critical. These funds may be best placed in a separate savings account or other interest bearing fund to be maintained as a cash reserve for equipment replacement.

CALCULATING EQUIPMENT REPLACEMENT

Some simple comparisons can be made to help in deciding when to replace equipment. Typical cost estimates are needed for the old and new equipment, including present cost or value of each, the years of life expected, operating costs including fuel, repairs, and operator. For example:

<u>Item</u>	<u>Old Truck</u>	<u>New Truck</u>
Present value (dollars)	20,000	60,000
Overhaul cost (dollars)	10,000	
Expected life (years)	2	5
Annual operating cost (dollars)	19,000	18,000
Salvage value	10,000	10,000

D = Depreciation

A = Present value or cost (including overhaul)

S = Salvage value

N = Expected life of equipment

AAI = Average Annual Investment

I = Interest rate

I\$ = Interest on Average Annual Investment for each truck

$$D = \frac{A - S}{N}$$

$$AAI = \frac{(A - S)(N + 1) + S}{2N}$$

$$I\$ = I \times (AAI)$$

Old truck annual costs for the next 2 years are:

$$D = \frac{\$20,000 + \$10,000 - \$10,000}{2} = \$10,000$$

$$AAI = \frac{(\$20,000 + \$10,000 - \$10,000 (2 + 1) + \$10,000)}{2 \times 2} = \$25,000$$

$$I\$ = 10\% \times \$25,000 = 2,500$$

$$\text{Operating Costs} = \underline{19,000}$$

$$\text{Total} = \$31,500$$

New truck annual costs for the next 5 years are:

$$D = \frac{\$60,000 - \$10,000}{5} = \$10,000$$

$$AAI = \frac{(\$60,000 - \$10,000) (5 + 1) + \$10,000}{2 \times 5} = \$40,000$$

$$I\$ = 10\% \times \$40,000 = 4,000$$

$$\text{Operating Costs} = \underline{\$18,000}$$

$$\text{Total} = \$32,000$$

It appears that the new truck is slightly more expensive.

Other cost considerations might be calculated. The new truck may be more reliable. You estimate that it will haul 5 more days each year at 20,000 board feet per day. If each M bf hauled shows \$10 per M bf more in income than costs, then: $5 \times 20 \times 10 = \$1,000$ value because of the new truck. This is subtracted from the cost of the new or added to the cost of the old.

Investment credit on federal income tax also might be included. For a 5-year life, this is a reduction in tax for the first year of 10 percent @ \$60,000 = \$6,000.

Annual savings for the 5 years is \$6,000 divided by 5 = \$1,200.

Including these two costs provides the following annual cost comparison:

	<u>Old Truck</u>	<u>New Truck</u>
	----- dollars -----	
Depreciation	10,000	10,000
(Capital carrying cost)	2,500	4,000
Operating cost	19,000	18,000
Increased production	1,000	
Investment credit	<u> </u>	<u>- 1,200</u>
Total	32,500	30,800

Especially with the production changes, costs might be more accurately examined with calculations per M bf throughout. Also, a higher interest rate would make the new truck less attractive.

Factors that may be important but not easily reduced to figures, include:

1. Size and duration of investment.
2. Possible improvement of new equipment in the future.
3. Changed market or supply expected.
4. Changed capacity, safety, or versatility.
5. Parts and service availability.
6. Effects of inflation.
7. Differences in skill required of operators.
8. Availability of money or equipment.

SUMMARY

This is a basic cost-record system. Using it with or without a bookkeeper will give you control of the financial part of your business and will help you to manage your business for profit.

You may feel that to work with all the forms in this cost-record system will take too much of your time and effort. But it is more important that you manage your business and not get tied down with bookkeeping details. Therefore, you may decide to keep your business information on these forms, and then turn them over to a bookkeeper or accountant.



